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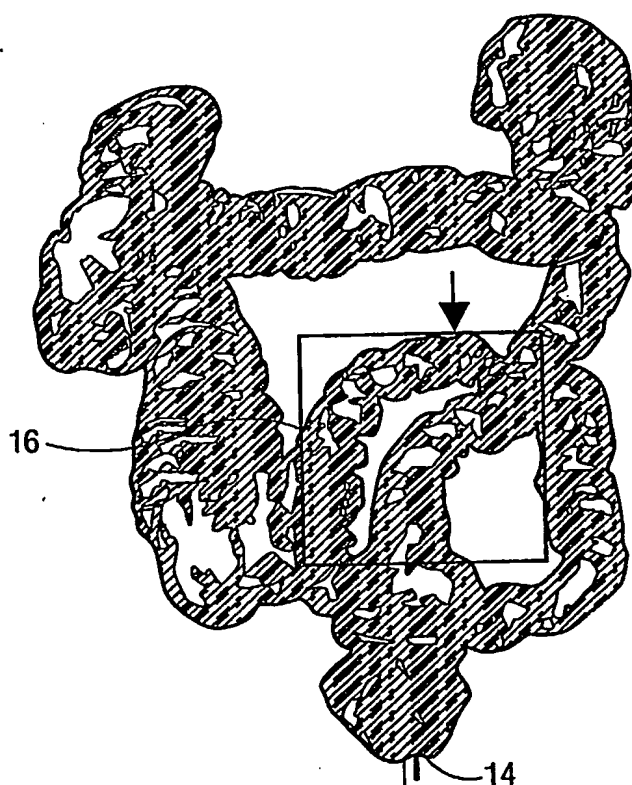


FIG. 1

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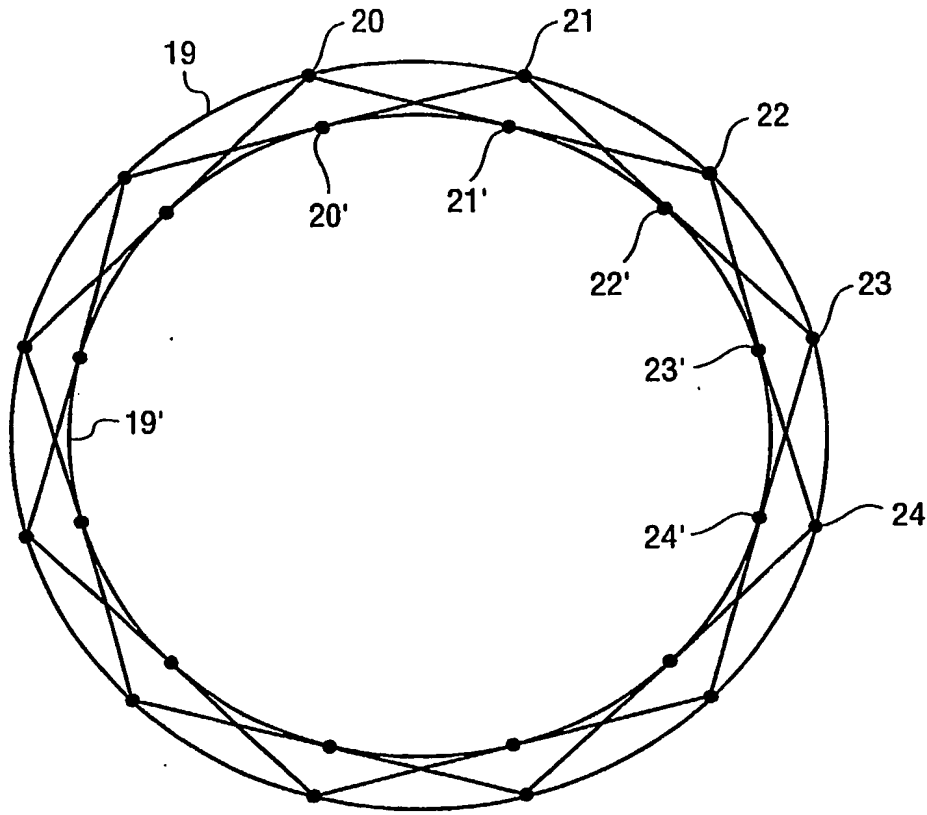


FIG. 2A

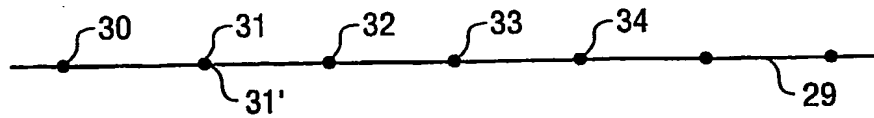
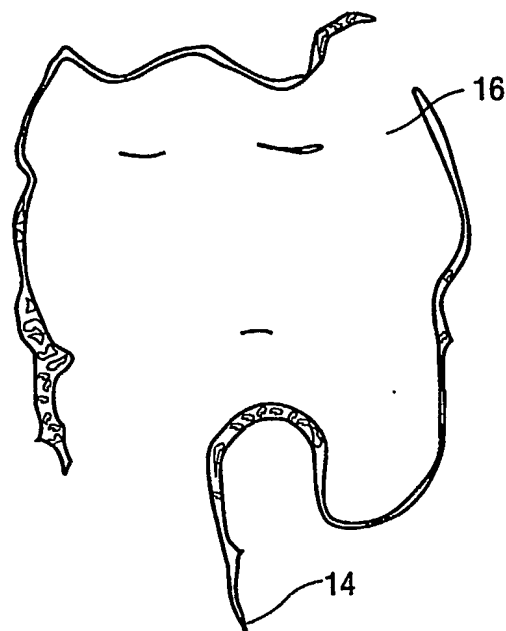


FIG. 2B

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Shrunken 3d surface of the human colon
(Number of iterations = 250)

FIG. 3

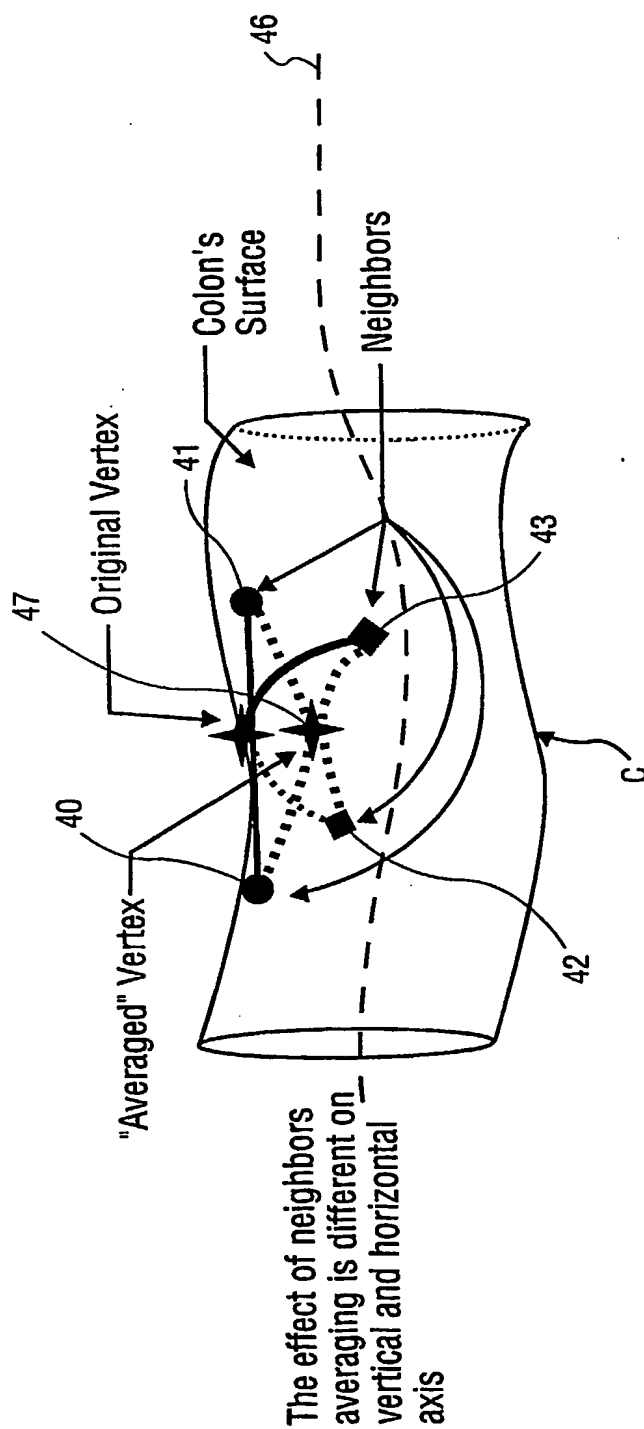


FIG. 4

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Vertices "inside" the loops are moved
outside the surface (because of the "blue"/
square neighbors)

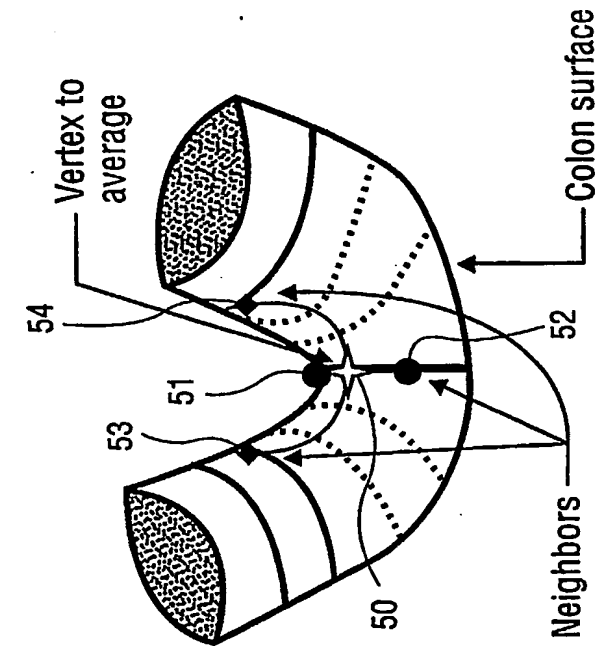


FIG. 5A

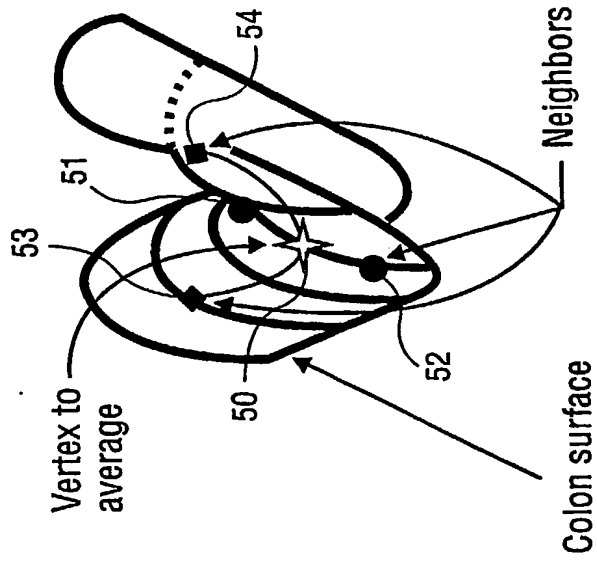


FIG. 5B

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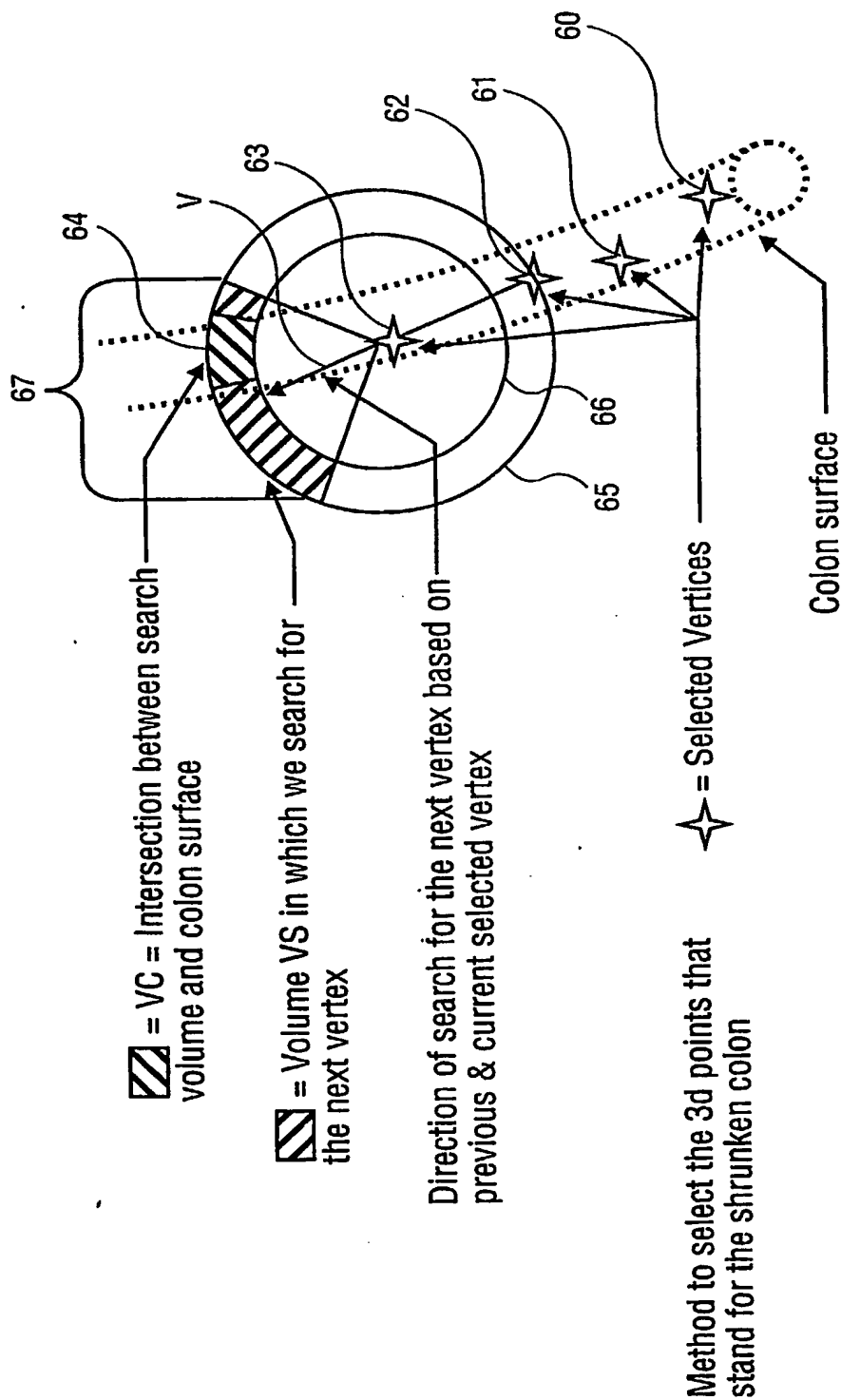
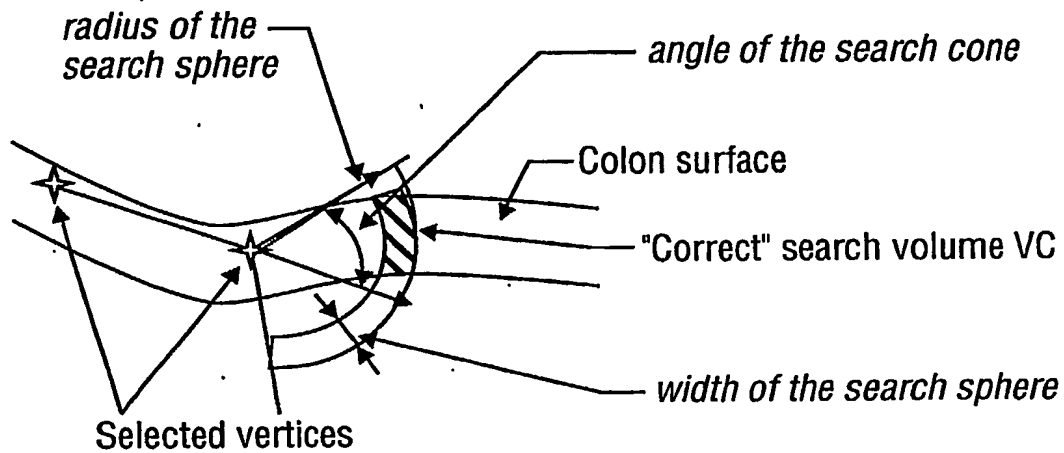


FIG. 6

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Whichever vertex from VC is good enough for modeling the shrunken colon.

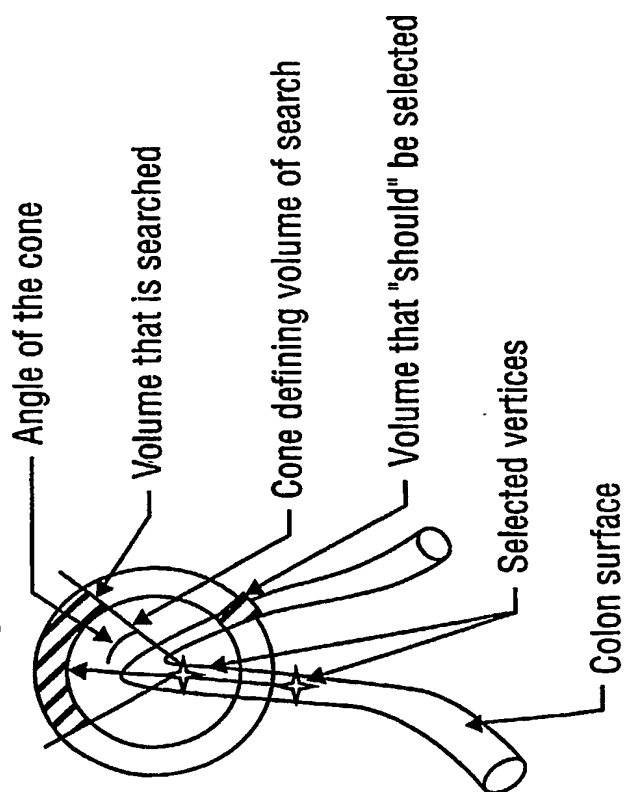
FIG. 7A

Two possible versions of the shrunken colon model.

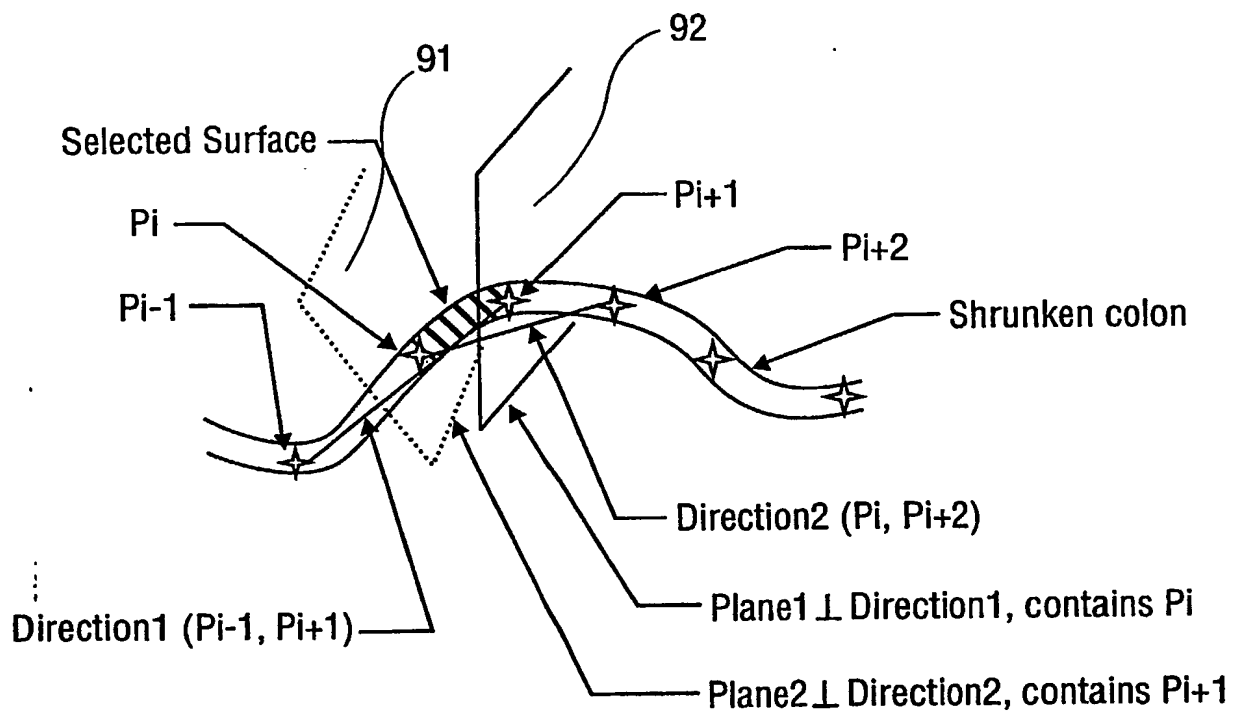
FIG. 7B

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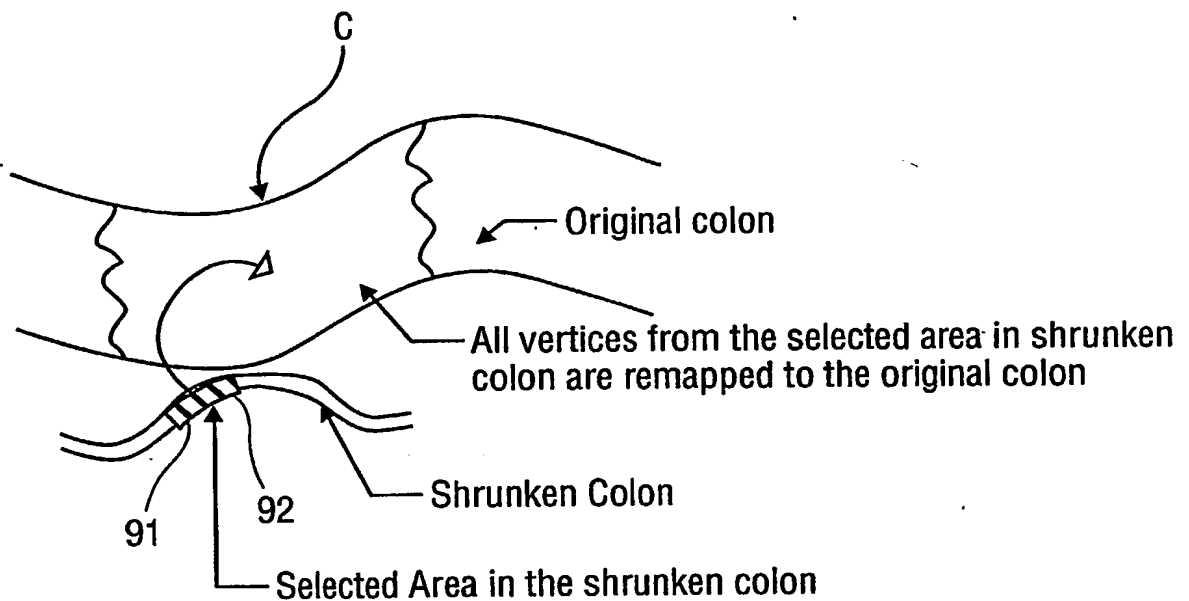
The cone's angle controls how correct is the shrunken colon tracking. In this case there is no vertex in the selected search volume and the colon modeling is stopped too soon.

**FIG. 8**

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**FIG. 9**

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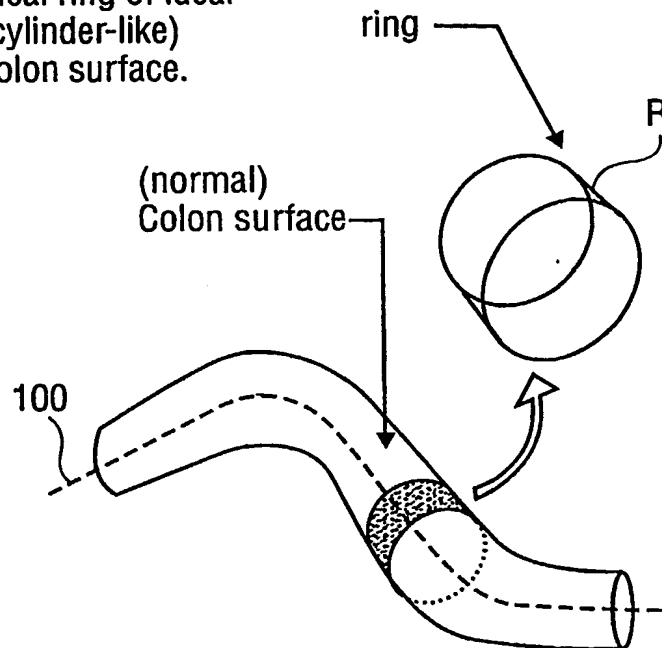
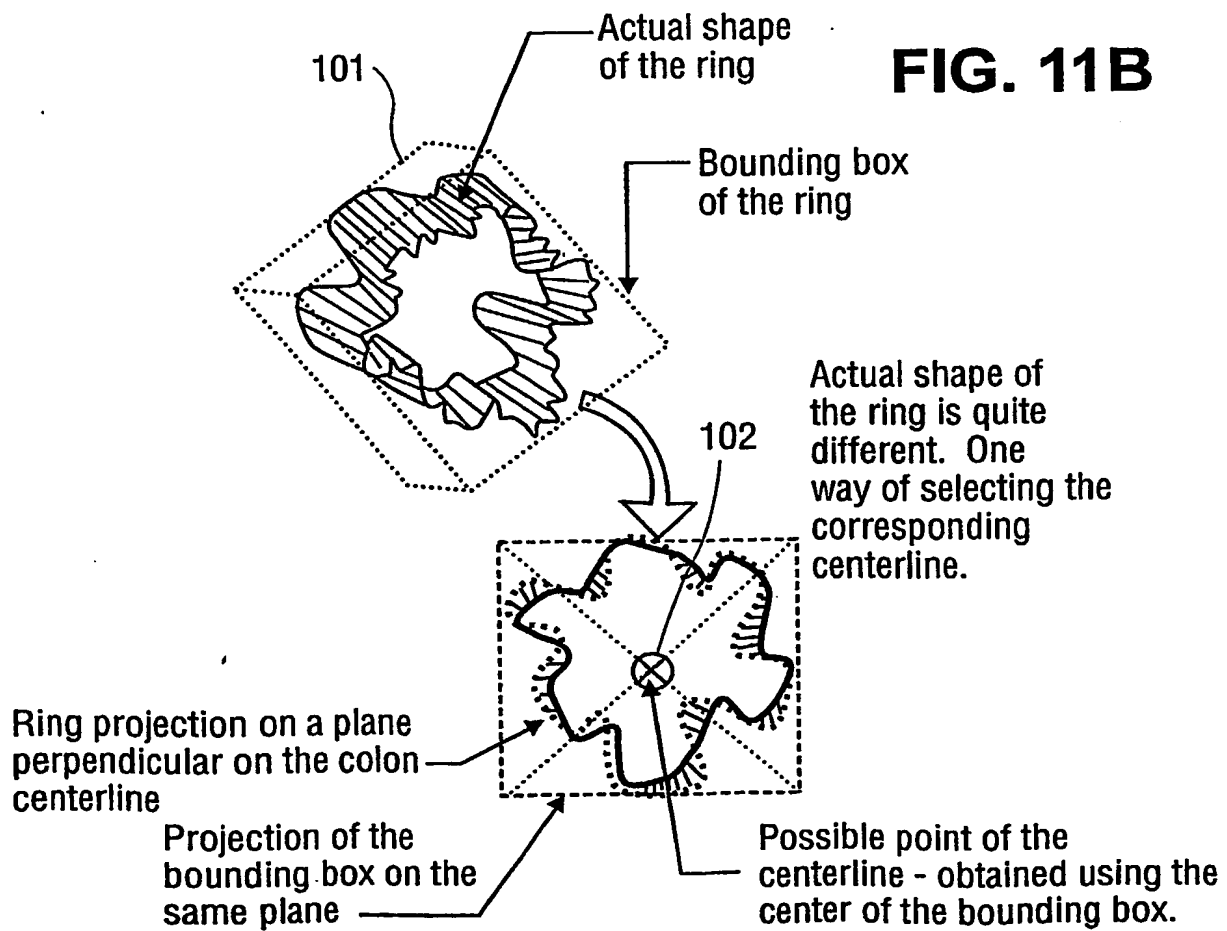
All vertices from the original colon (who are obtained by remapping the vertices from the selected area in the shrunken colon) from a "ring" whose axis is parallel to the colon centerline.

FIG. 10

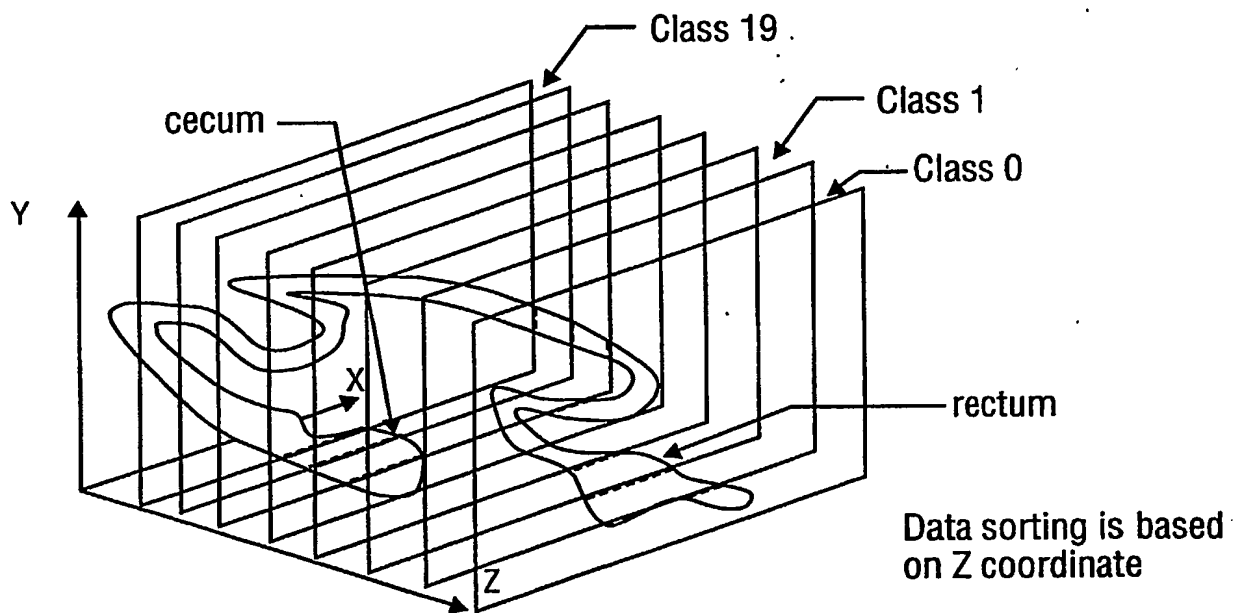
FIG. 11A

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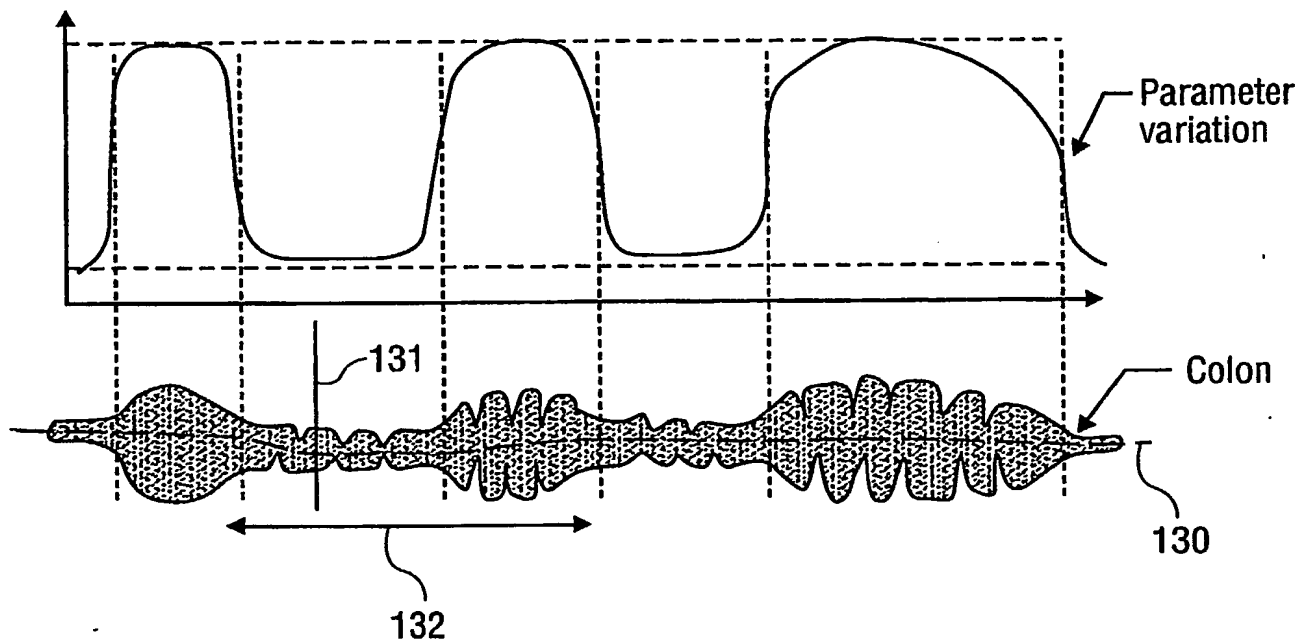
Ideal ring of ideal
(cylinder-like)
colon surface.

**FIG. 11B**

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**FIG. 12**

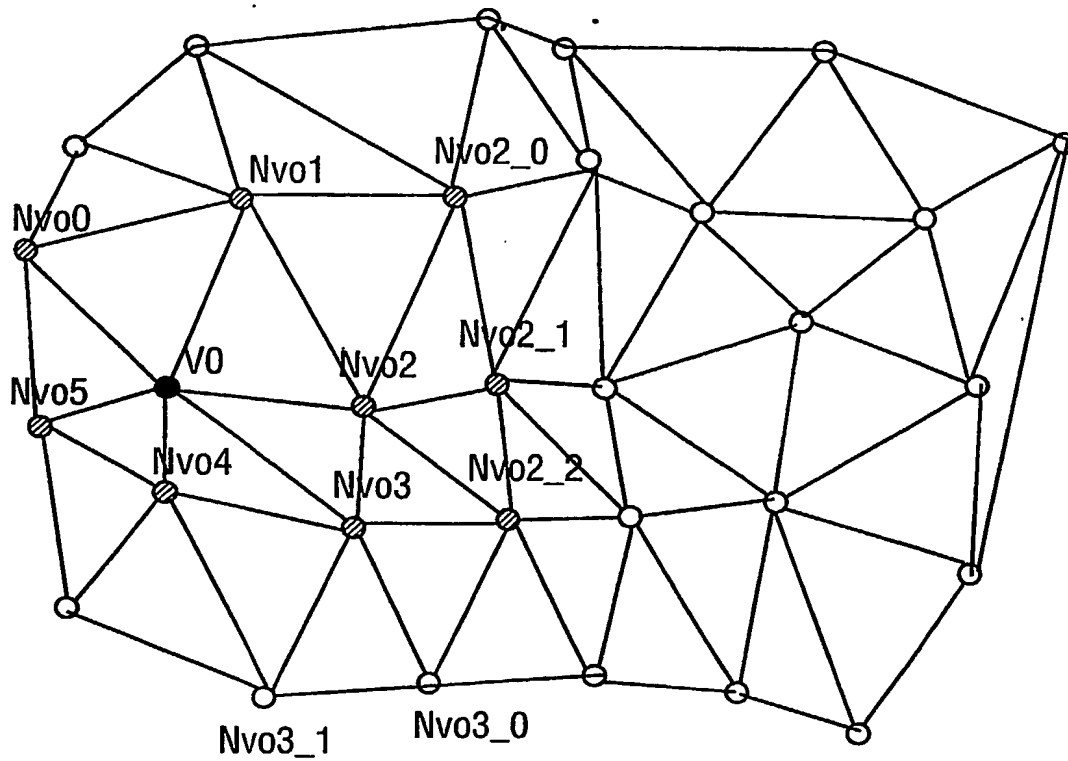
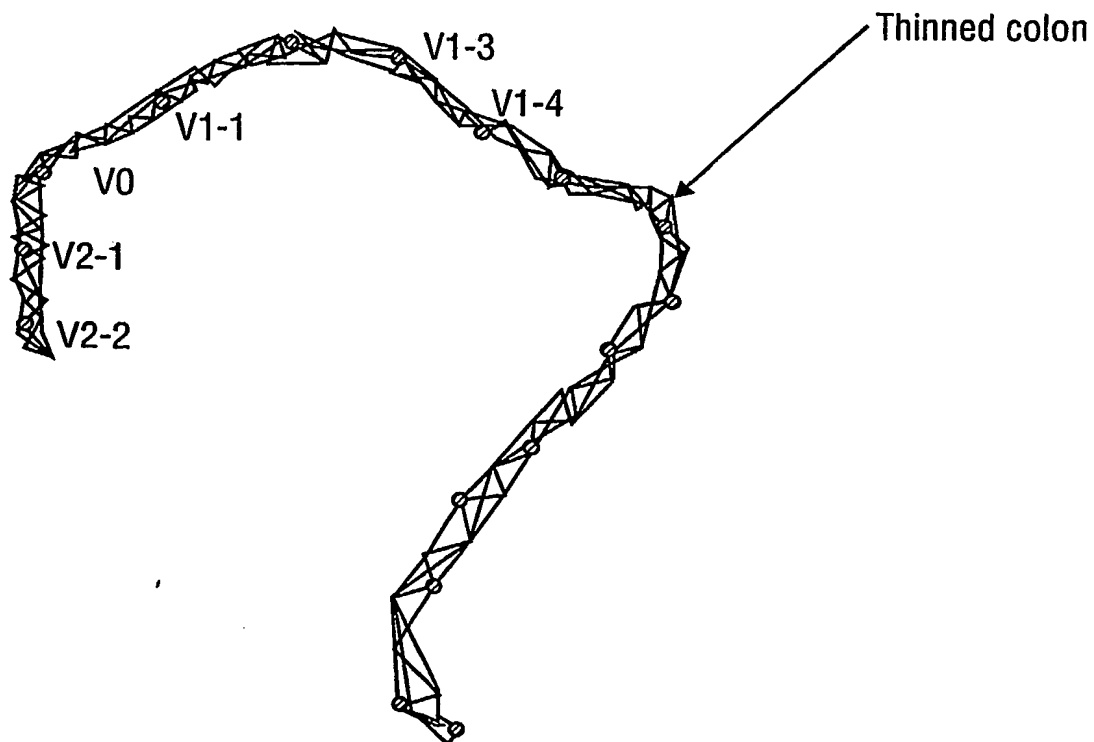
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A possible approach to automatically compute the centerline
detection algorithm parameters

FIG. 13

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**FIG. 14****FIG. 15**